

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF WISCONSIN
GREEN BAY DIVISION

UNITED STATES OF AMERICA and THE)
STATE OF WISCONSIN,)
Plaintiffs,) **Case Action No.: 10-C-910**
v.)
NCR CORPORATION, APPLETON) **AMENDED AND SUPPLEMENTAL**
PAPERS INC., CITY OF APPLETON, CBC) **DECLARATION OF JAMES E. EVANS**
COATING, INC., GEORGIA-PACIFIC) **IN SUPPORT OF MENASHA'S**
CONSUMER PRODUCTS LP, KIMBERLY-) **OPPOSITION TO THE PROPOSED**
CLARK CORPORATION, MENASHA) **CONSENT DECREE FILED ON OR**
CORPORATION, NEENAH-MENASHA) **ABOUT DECEMBER 1, 2010 AT DKT.**
SEWERAGE COMMISSION, NEWPAGE) **31-1**
WISCONSIN SYSTEMS, INC., P.H.)
GLATFELTER CO., U.S PAPER MILLS)
CORP. and WTM I COMPANY,)
Defendants.)
MENASHA CORPORATION,)
Counter-Claimant,)
v.)
UNITED STATES OF AMERICA and THE)
STATE OF WISCONSIN,)
Counter-Defendants.)

I, James E. Evans, declare as follows:

1. In 2008, Hunsucker Goodstein PC (“HG”), defense counsel for Menasha Corporation (“Menasha”), retained me to perform analysis related to the polychlorinated biphenyl (“PCB”) contamination in the Lower Fox River and Green Bay Superfund Site in Wisconsin (“LFR Site”). I was retained initially in connection with the *NCR Corp. v. George A. Whiting Paper Co.* litigation (Case No. 08-CV-00016-WCG, in the Eastern District of Wisconsin) (“Whiting Litigation”). My retention has been extended to include the *U.S. v. NCR Corp.* litigation (Case No. 10-910-WCG, in the Eastern District of Wisconsin) (“Enforcement Litigation”).

2. On December 1, 2010, the United States and the State of Wisconsin (the “Governments”) issued notice of a proposed settlement of the liability of Brown County, the City of Green Bay, and the “Settling Federal Agencies,” as defined in Dkt. 31-1 at 12, including the United States Army Corps of Engineers (“USACE”) in the Enforcement Litigation. Shortly thereafter, I was asked by HG to conduct an evaluation of the existing historical and site data to evaluate whether the proposed settlement of the Settling Federal Agencies, particularly the USACE, is fair and represents a reasonable approximation of the USACE’s potential liability for the LFR Site.

3. In February 2011, I prepared a declaration setting forth my opinion that the proposed settlement between the Governments and the Settling Federal Agencies was not fair and did not represent a reasonable approximation of the USACE’s potential liability for the LFR Site. Dkt. 173-14 at 80-115. The opinion I provided was based on the then-available information. Since that time, I am aware that new information has been obtained relating to the USACE’s activities on the Lower Fox River (“LFR”), including additional documents and

deposition testimony relating to the operation of the nine federal dams located on the LFR. I was asked by HG to review this new information and re-evaluate whether the proposed settlement of the Settling Federal Agencies, particularly the USACE, is fair and represents a reasonable approximation of the USACE's potential liability for the LFR.

4. I am a Professor of Geology in the Department of Geology at Bowling Green State University in Bowling Green, Ohio, receiving tenure in 1994 and promotion to full professor in 2001. Part of my activities as a full-time professor is to conduct research into sedimentary and environmental geology and surface water hydrology. This includes the study of depositional environments, sedimentation, removal of dams, contaminated sediment, sediment transport, and physical flow conditions.

5. I have personal knowledge of the facts set forth herein, and if called upon as a witness I would testify competently to them.

EXPERT QUALIFICATIONS

6. I obtained my Bachelor of Arts degree in Geology, *magna cum laude*, from Carlton College in Minnesota in 1976. In 1980, I obtained my Masters of Science in Hydrology and Ecology from the University of Minnesota. I obtained my Ph.D. in Geological Sciences in 1988 from the University of Washington, in Seattle.

7. I have over 25 years of experience in the study and evaluation of sediment transport and the operation and maintenance of dams. I have been involved with and worked on or continue to be involved with components of five major dam removal projects throughout my career. These include the removal of the IVEX Corporation Dam (Chagrin River, Ohio), the removal of the Coho Dam (Huron River, Ohio), the removal of the Secor Road Dam (Ottawa

River, Ohio), the ongoing removal of the Ballville Dam (Sandusky River, Ohio) and the ongoing removal of several small dams in the Oak Opening Metropark (Swan Creek, Ohio).

8. I have also worked on several projects involving the analysis of contaminated sediments in rivers and the Great Lakes. These included analysis of PCBs and certain metals in the sediments of Lake Superior; evaluation of heavy metals, PCBs, and pesticides in the reservoir sediment of the Secor Road Dam; and, evaluation of 18 metals, 19 species of pesticides, 7 species of PCBs, and 136 species of other organic compounds in the reservoir sediment of the Ballville Dam.

9. I have authored numerous publications regarding sedimentary and environmental geology and surface water hydrology. I was the convener of special sessions on dam removals at professional conferences (the Geological Society of America in 2000 and 2006, and the American Geophysical Union in 2010). I have been editor of two special professional publications about dam removals (for the *Journal of Great Lakes Research* in 2007 and for the Geological Society of America in the *Reviews in Engineering Geology* series in 2103). Finally, I have served as Vice President of the Ohio Dam Safety organization (2007-2008).

10. I have not provided expert testimony in the past four years, nor have I previously been qualified as an expert witness. I was deposed on November 11, 2011 in *Menasha Corp. v. Employers Ins. Co. of Wausau* (Case No.007-cv-1406 in the Wisconsin Circuit Court, Winnebago County).

11. A list of my publications through February 2011 was contained in my resume included with my February 2011 declaration as Attachment A. Dkt. 173-14 at 91.

STANDARD TO WHICH MY OPINIONS ARE GIVEN

12. My opinions are given to a reasonable degree of scientific certainty. In addition, my opinions are based on my knowledge, skill, experience, training and education.

13. Based on my review of the new information, pertinent documents, statutes, regulations and my professional experience, I prepared this Amended and Supplemental Declaration that details the conclusions of my investigation.

BASES OF MY OPINIONS

14. For this Amended and Supplemental Declaration, I reviewed pertinent documents and other information that have been gathered since the filing of the proposed settlement, review my prior opinions. In this Amended and Supplemental Declaration, I provide an updated opinion regarding whether the proposed settlement between the Governments and the Settling Federal Agencies represents a reasonable and fair approximation of the liability of the Settling Federal Agencies for the PCB contamination at the LFR Site.

15. All of the information I relied upon in forming my supplemental opinions in this Amended and Supplemental Declaration is of a type reasonably relied upon by experts in my field in forming opinions.

16. A complete list of the documents I relied on in forming my opinions in my February 2011 declaration was included with that declaration as Attachment B. Dkt. 173-14 at 110. A complete list of the new sources of information I relied on in forming my opinion is attached to this Amended and Supplemental Declaration as Attachment 1. This includes, but is not limited to, the following information:

- (a) the June 7, 2012 deposition of James Bonetti (“Bonetti Dep.”) (Tr. Exh. 6033);
- (b) the September 6, 2012 Fed. R. Civ. P. 30(b)(6) Deposition of Dr. Joseph

Gailani (“Gailani 30(b)(6) Dep.”) (Tr. Exh. 6146);
(c) the September 6, 2012 Deposition of Nicholas Brittnacher (“Nicholas Brittnacher Dep.”) (Tr. Exh. 6087);
(d) the September 26, 2011 United States Answer to Counterclaims (Dkt. 224);
and,
(e) the June 18, 2012 United States Responses to Request for Admissions (“U.S. Response to RFA”) (Dkt. 512-2).

17. None of the sources of information listed on Attachment 1 was available at the time of my prior February 2011 declaration.

MY OPINIONS RELATED TO THE POTENTIAL LIABILITY OF THE SETTLING FEDERAL AGENCIES AT THE LFR SITE

18. Based on the information I have previously reviewed, and as confirmed by the deposition testimony of James Bonetti of the USACE, the USACE exclusively has been operating and maintaining nine federal dams and, at times, seventeen locks located on the LFR for many decades since at least 1970. Bonetti Dep. (Tr. Exh. 6033) at 119:11-24.

19. By January 1975, at the latest, sampling conducted on behalf of the USACE confirmed that the contaminants in at least some of the sediments in the LFR included PCBs. U.S. Response to RFA (Dkt. 512-2) at Response No. 308. The USACE has acknowledged it was aware that PCBs were present in the sediments at the LFR Site as early as 1975, if not earlier. Gailani 30(b)(6) Dep. (Tr. Exh. 6146) at 129:13-23.

20. The documentary evidence previously reviewed and cited to in paragraph 18 of my prior February 2011 declaration (Dkt. 173-14 at 80), and admissions by the United States,

demonstrate PCB-contaminated sedimentation has occurred behind many of the dams and locks on the LFR. U.S. Response to RFA (Dkt. 512-2) at Response No. 310.

21. The presence, operation and maintenance of dams have a major impact on sediment transport in any river. Management decisions regarding operations or maintenance can result in deposition, homogenization, erosional scouring, and remobilization of previously impounded reservoir sediment, including PCB-contaminated sediment.

22. At the bottom of each of the federally owned and operated dams on the LFR, there are tainter gates. These tainter gates open from the bottom, and are used to control and monitor the water flow through the dam. Opening the tainter gates on the dams caused sluicing and removal of the sediments previously impounded behind the dam. Bonetti Dep. (Tr. Exh. 6033) at 154:14-23, 173:9 -174:15, 259:8-260:4; Brittnacher Dep. (Tr. Exh. 6087) at 30:15-18; Gailani 30(b)(6) Dep. (Tr. Exh. 6146) at 59:12-60:15.

23. In addition to opening the tainter gates, the opening and closing of the locks also caused a sluicing effect as documented by the need to dredge sediment at the downstream entrance to the lock gates. Brittnacher Dep. (Tr. Exh. 6087) at 27:13; Bonetti Dep. (Tr. Exh. 6033) at 162:15-163:15.

24. Notwithstanding being aware of the presence of PCBs in the sediments that were impounded behind the federally owned and operated dams, the USACE was not concerned about the resuspension/relocation of contaminated sediments resulting from the operations of the federal dams, and the USACE operated the tainter gates with the purpose, at least in part, of causing the sluicing effect. Bonetti Dep. (Tr. Exh. 6033) at 170:11-19, 173:9-174:15, 226:12-227:23.

25. The documentary evidence indicates that these deposits that have accumulated upstream of the USACE-owned and –operated dams on the LFR have been contaminated by PCB concentrations significantly greater than the remedial action level of 1 part per million. The PCB concentrations in these deposits are a result of PCB-sorption to fine-grained sediment particles, and the downstream transport of sediment to these locations and deposition in the reservoir pools.

26. Radioisotope data from these same deposits indicates that reservoir sediments have been homogenized, or mixed, over time. Homogenization in these deposits is related to erosion, resuspension, mixing, and redeposition of sediment. Homogenization is also episodic, due to either natural events (flooding, actions of ice floes) or human activities (dredging, sluicing, ship propeller wash) or a combination of both. Homogenization of sediment containing PCBs significantly increases the volume and distribution of sediment materials that are contaminated and must be remediated.

27. In my opinion, the erosion, resuspension, mixing, and downstream redeposition of PCB-contaminated sediment in the LFR was facilitated in part by the presence, operation, maintenance, and remediation activities of the USACE dams. Specifically:

- (a) the dams created reservoirs that served in most cases as sites of PCB-contaminated sediment deposition;
- (b) these reservoirs were susceptible to wind/wave resuspension;
- (c) the operations of the locks, spillways, and/or floodgates influenced the behavior of the PCB-contaminated sediments with respect to erosion, remobilization, mixing, and redeposition; and,

(d) leaving the spillway or floodgates partially open to relieve stress on the structure of the dam or to control water flow promoted, and continues to promote, sluicing or remobilization of reservoir sediment and transport downstream.

28. Accordingly, in my opinion the presence of the dams, their mode of operation and the maintenance activities performed on these structures has played a significant role in the environmental distribution of PCB-contaminated sediment in the LFR and to the extent and potential cost of necessary environmental remediation. As an example of the possible significance, Deposits GG and HH in the reservoir upstream of the DePere Dam contained 131.6 kg of PCBs within the top 10 cm of sediment, and this amount represents about 53% of the PCBs recorded in the upper 10 cm of the sediment in all of OU3 in 2002. *Remedial Investigation Report*, RETEC, 2002 (Tr. Exh. 3).

29. The United States has asserted that its liability in this case is only \$4.5 million out of a potential total liability assessment of approximately \$1.5 billion. In other words, the United States' proposed proportion of the total liability is approximately 0.3%. For the United States to document such minimal liability, the United States needs to, at a minimum, establish the following:

- (a) that the trapping efficiencies of the nine federally owned and operated dams on the LFR are low and that these reservoirs did not behave as sites of deposition;
- (b) that sediment homogenization, which greatly increases the volume of contaminated sediment, did not occur in the reservoirs upstream of these nine dams;
- (c) that reservoir pool changes caused by operations of the dams did not result in remobilization of sediment and transport of PCB-contaminated

sediment downstream; and,

(d) that partially opening the spillways or floodgates did not cause sluicing of reservoir sediment downstream.

30. The evidence cited above demonstrates that the United States cannot make these showings. To the contrary, the evidence shows that:

(a) the trapping efficiencies of the dams was sufficient for the dams to act as sites of deposition;

(b) that sediment homogenization did occur in the reservoirs upstream of these nine dams;

(c) that the reservoir pool changes caused by operations of the dams did result in remobilization of sediment and transport of PCB-contaminated sediment downstream; and,

(d) the opening of the tainter gates caused sluicing of the reservoir sediments downstream, and the USACE knew it would.

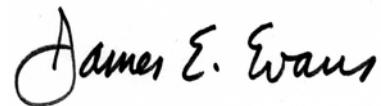
SUMMARY AND CONCLUSIONS

31. Over many decades, the nine federally owned and operated dams on the Lower Fox River have played a role in the erosion, transport, and deposition of sediment, including PCB-contaminated sediment. The upstream reservoirs are sites of sediment deposition. Sediment dynamics in the upstream reservoirs facilitate the subsequent erosion, remobilization, mixing, and redeposition that has homogenized the sediment and significantly increased the volume of PCB-contaminated sediment and affected its distribution.

32. The release of such sediments would enable the sediments to migrate to other locations of the Lower Fox River resulting in the contamination or recontamination of these areas.

33. Based on the above, it is my professional opinion, within a reasonable degree of scientific certainty, that the presence of nine federally owned and operated dams on the Lower Fox River, their mode of operation, and the maintenance activities performed on these structures, has played a significant role in the environmental distribution of PCB-contaminated sediment in the Lower Fox River and to the extent and potential cost of necessary environmental remediation. Accordingly, it is my professional opinion that the proposed settlement amount of \$4.5 million for the Settling Federal Agencies is too low, and does not reasonably approximate the potential relative liability of the Settling Federal Agencies, particularly the USACE, against the potential liability of the remaining defendants.

I declare under the penalty of perjury under the laws of the Governments that the foregoing is true and correct and that this declaration was executed on April 26, 2013, at Bowling Green, Ohio.

A handwritten signature in black ink that reads "James E. Evans". The signature is fluid and cursive, with "James" on the top line and "E. Evans" on the bottom line.

James E. Evans

Attachment 1: References Cited

Newly Cited References:

Declaration of James E. Evans in Support of Menasha's Comments to the Proposed Consent Decree Filed on or About December 1, 2010 at Dkt. 31-1, February 10, 2011 (Dkt. 173-14 at 80)

United States Answer to Counterclaims, September 26, 2011 (Dkt. 224)

Deposition of James Bonetti, June 7, 2012 (Tr. Exh. 6033)

United States Responses to Request for Admissions, June 18, 2012 (Dkt. 512-2)

Deposition of Nicholas Brittnacher, September 6, 2012 (Tr. Exh. 6087)

Fed. R. Civ. P. 30(b)(6) Deposition of Dr. Joseph Gailani, September 6, 2012 (Tr. Exh. 6146)

Previously Cited References:

RETEC, *Remedial Investigation Report: Lower Fox River and Green Bay, Wisconsin*, December 2002 (Tr. Exh. 3)

Attachment B to the Declaration of James E. Evans in Support of Menasha's Comments to the Proposed Consent Decree Filed on or About December 1, 2010 at Dkt. 31-1, February 10, 2011 (Dkt. 173-14 at 110)